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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,134	12/28/2001	Timothy C. Ostwald	2001-065-TAP	1623

7590 07/16/2004

STORAGE TECHNOLOGY CORPORATION  
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EXAMINER

KEENAN, JAMES W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/034,134

**Applicant(s)**

OSTWALD ET AL.

**Examiner**

James Keenan

**Art Unit**

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Canaday et al (US 6,668,991).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Canaday et al show a media storage library of the type set forth in the claims, including multiple library modules (enclosures), storage cell arrays, multiple robots, and multiple guide rails, wherein power and control signals are sent to the robots through the guide rails in an exclusive and uninterrupted fashion, and wherein the guide rails may form complex paths.

Despite applicant's comments to the contrary, Canaday et al do teach that the robot is controlled outside the line of sight of the controller. Applicant asserts that "Canaday merely states that libraries can be connected in a modular fashion", further

alleging that Canaday et al fail to provide any description of the modularity. However, Canaday et al disclose in column 9, lines 50-65 that the modular construction could involve one, two, or three dimensional movement (and control) of a robot along columns, rows, cylindrical walls, etc. Although the phrase "line of sight" may not be explicitly disclosed, it is inherent within this description that the robot would be powered and controlled beyond the line of sight of the controller when used in such a two or three dimensional modular array. This also applies to new claim 8.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luffel et al (US 6,222,699, cited by applicant) in view of Benson et al (US 5,241,380).

Luffel et al show a modular media storage library essentially as claimed, including robots which receive exclusive and uninterrupted power through guide rails which form a complex path; however, control of the robots is handled by a wireless control module rather than through the rails.

Benson et al teach that it is desirable in an environment wherein an automated robotic vehicle runs along rails to send power and control signals through the rails. This is explicitly disclosed as an advantage over wireless communication systems. Note that

the robot vehicle could include arms or other work elements, and that the rails may have different configurations.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Luffel et al by utilizing the rails to send control signals to the robots, as shown by Benson et al, as this would be simpler, cheaper, and more reliable than a wireless system.

Re claim 4, to have mounted the storage cells and guide rails on "walls", as broadly claimed, would have been a mere design expediency, particularly in the absence of any showing of criticality.

Applicant argues that Benson et al fail to show the power and control signals to be transmitted through the guide rails, alleging that they are instead transmitted through separate signal rails 90. It is submitted that applicant's claims are not so limiting as to preclude the track sections 11, which include the signal rails 90, from being considered the guide rails. While it is true that the carriage wheels 58, 81 ride along a bracket rail 60, it is important to note that this bracket is also part of the track section 11. Applicant's claim merely requires the robot to be "coupled to the guide rail". It does not set forth the structure of the guide rail with sufficient specificity as to preclude such an interpretation.

Applicant further argues that Benson et al is non-analogous art in that it relates to a video camera surveillance system rather than a robot in a storage library. In column 9, lines 33-36, Benson et al disclose that the carriage could mount "hoists, robot arms, or other work elements" instead of the video cameras.

Finally, applicant argues that there would be no motivation to combine the references, alleging that the combination is based on improper hindsight. On the contrary, as previously noted, Benson et al explicitly state that sending the signals through the rails is to overcome problems associated with wireless systems, such as that of Luffel et al. The motivation couldn't be clearer.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Applicant's arguments filed 4/29/04 have been fully considered but they are not persuasive. Applicants arguments have been fully addressed above.

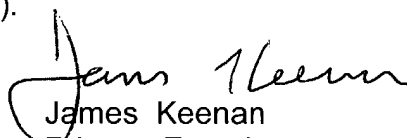
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 703-308-2559. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James Keenan  
Primary Examiner  
Art Unit 3652

jwk  
7/13/04